

The MINES of ARIZONA

This department is under the direction of Mr. W. E. Defty, the well known mining engineer, who will carefully scrutinize all matters relating to mining in order that only reliable information regarding legitimate enterprises shall find a place here.

The Republican would be pleased to receive information from any part of the state regarding the development of the mining industry. All communications should be addressed: Mining Department Arizona Republican.

Clifton-Morenci

Probably the best news received this week is the reported ending of the strike at Clifton-Morenci and the return of the men to work. This misunderstanding between employers and men now seems to be on the way to a happy settlement and let us hope a continuous and permanent one. The men return on the scale schedule as presented by the companies and based on the price of copper.

Phoenix Mining Interests

We have from time to time called attention to the interest that Phoenix people are taking in mining. One of the latest interests is from the county court house. Many of the employees have formed a syndicate and are putting up their money as needed in the development of a prospect north of Kingman. Varying samples of ores exhibited from the property unquestionably shows favorable earmarks and we sincerely trust their legitimate endeavor to develop something big will be crowned with every success and their spirit of enterprise handsomely rewarded.

The landlord of our famous hostelry, J. C. Adams, has become interested in the San Juan mine near Safford in Graham county. J. J. Birdno of the land office is one of the principal owners.

A. Vilman, a business man of Mesa, has recently bonded his Copper Crown property in the Superstition mountains, near Goldfield, to George H. Holgate and systematic development to depth will be commenced at once. Some excellent appearing ores have already been exposed in this property.

OATMAN

Big Jim ledge proves to be 57 feet wide, 46 feet in solid ore. This is one of the greatest ore bodies ever encountered in the district. We believe the Oatman District will prove to be one of the greatest gold mining districts in the country and that great profits will be made in Oatman stocks. The greatest profit will be made by those who invest while prices are low. We advise immediate purchase of

LUCKY BOY

at the market. Lucky Boy is only about 1000 feet from Big Jim. About the same distance from the Black Eagle shaft of the famous Tom Reed. The Carter strike is on the big Lucky Boy vein. Stock now selling at a very low price. It will go higher. Buy Lucky Boy today. Write for our Free Market Letter.

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New Reduced Prices On

TIRES

Goods shipped to all points C. O. D. Money refunded on goods returned intact within one week.

Special Prices on	Gray	Red
28x3	\$5.80	\$1.70
30x3	6.15	1.75
32x3	7.30	1.80
30x3 1/2	8.30	2.10
31x3 1/2	8.75	2.20
32x3 1/2	9.00	2.25
34x3 1/2	9.70	2.40
36x3 1/2	10.80	2.50
30x4	12.00	2.75
31x4	12.00	2.85
32x4	12.75	2.95
33x4	13.10	3.05
34x4	13.50	3.15
35x4	13.75	3.25
36x4	14.25	3.35
34x4 1/2	16.80	3.90
35x4 1/2	17.30	4.00
36x4 1/2	17.90	4.15
37x4 1/2	18.35	4.20
35x5	19.95	4.70
36x5	20.75	4.85
37x5	21.00	5.00

Prices Subject to Change Without Notice

Automobile Tire Co.

6th & Olive Sts., Los Angeles, Cal.
H. A. Demarest
533 Van Ness Ave., San Francisco.
1758 Broadway, Oakland
2nd & B Sts., Fresno, Cal.
Hotel Fresno Bldg., Fresno, Cal.
The Oldest Automobile Tire Jobbing Concern in the United States and the largest in the world.

V. Messinger of Glendale, in association with C. D. Rogers of San Francisco, is going to develop the White Peach mine, north of Beardsley. The property has been worked in a desultory way for some years. A few years back this locality was quite active with mining development.

Copper Earnings

Since the price of copper advanced to better than 24 cents and a probability of going higher the question arises as to how much the standard coppers will earn on the increased prices. The following table shows the present earning capacity of a few of the Arizona coppers, with copper at 25 cents:

Calumet & Arizona	\$21.20—22.25%
Inspiration	22.10—46.5%
Miami	12.21—32.2%
Old Dominion	18.90—28.8%
Ray Consolidated	7.65—20.9%
Shannon	6.64—73.7%
Shattuck Arizona	7.51—22.7%

There is no negotiation in the stocks of the Copper Queen, Phelps-Dodge or the United Verde; both are close corporations.

Miami Copper Co.

In the year 1915 Miami Copper company produced 41,000,000 pounds of copper and earned \$3,608,000 net, or \$4.82 per share on its 747,112 shares outstanding, while dividends amounted to \$2.25 per share. Cost of production was 8 1/2 cents per pound and the company received approximately 17.3 cents per pound for its copper. In 1914 the company produced 32,296,016 pounds of copper at a cost of 8.2 cents per pound and earned \$1,365,816, or \$1.84 per share.

Quicksilver

Last week we reported that this metal had jumped up to the figure of \$165 per flask. But this week it takes a phenomenal soaring and is quoted at \$225 per flask with the conditions favoring it still going higher. It would mean a great deal to the properties north of Phoenix if they were now developed and producing. Still they ought to be sound and substantially good remunerative producers even if quicksilver was around its normal price.

H. S. Griswold of this city has been elected treasurer of the Sunflower Cinnabar Co. Mr. Griswold is a citizen of high standing in integrity and business methods and the addition of his name to the directorate will add considerably to its influence and stability. It is anticipated that a well planned and practical development of the property commensurate with its importance will be commenced at an early date. Capitalists have returned for investigating the property very recently.

There is a great deal of attention also been paid to the Bowman Reynolds property. Samples from this property were recently sent to New York for test purposes. On the Murphy property a small prospector's report has been erected and is working successfully turning out quicksilver. These properties will be permanent producers when started in the right way.

Cave Creek

The following are communications received from the east, addressed to me and the Bureau of Mines respectively and are given in their entirety: I am going to enclose a copy of a letter we are sending to Director Willis of the Bureau of Mines, because it seems to me it might be interesting reading for the people in Phoenix particularly who read the Sunday mining news of the Arizona Republican.

May I add one other thought or suggestion? That is, up here it looks to us as though the people in the neighborhood of Phoenix are a little slow and not up and doing in the same way as the people in the neighborhood of Tucson and in the southwestern part of Arizona generally.

You will find most of the free advertising through public sources, as well as private, enter their attention everywhere except in mining districts that would benefit the people of Phoenix. Whereas, on the other hand, the people of Phoenix and in that neighborhood have to pay the largest proportion of the taxes and expenses to support Mining Bureaus, the State University, and other public institutions or, if you please, that is the impression which prevails up here.

The illustration of my point I think appears perfectly clear in the enclosed copy letter, and the fact that in the Bureau of Mines issue they do not recognize the existence of Maricopa county as containing any gold bearing rock to an unlimited extent or amount, independent of the question of assets.

Personally I believe this is the time for the Arizona Republican to shout a little more on behalf of the gold bearing rock in Maricopa county and draw the public attention to its possibilities, and I am not asking for any free advertising of Cave Creek, or any properties in which I am interested, but for the county as a whole, regardless of whose mine it is or who is interested in it.

I believe the shouting on the subject generally will attract the attention of capital and labor to that locality which will return a benefit to the city of Phoenix and eventually every one of us will be benefited, independent of who gets the first benefit.

pecially at Cave Creek, where the "Bully Cave Mine," formerly "Phoenix Mine," is located.

We beg to state that there exists at Cave Creek a deposit of gold-bearing ore from which about \$300,000 in gold was extracted by the Phoenix Co., and which still contains, according to a recent report by Kirby Thomas, M. E., about 1,200,000 tons of proved ore, measurable and in sight in the open workings, exclusive of possible and probable ore in the unexplored ground.

Adjacent to these claims, which are patented, and contain a large plant, now shut down, are the claims and mill of the Cottonwood Creek Gold Mining Company, from which large amounts have been extracted in the last thirty years.

About five or six miles east on what is known as "Gold Hill," are mines known as the Carbonate Chief, Montclair, Dravo and Portmanteau, and about the same distance south-east, the Bonduant and Grand Traverse. All of these have been examined and reported on, by eastern engineers, and found to contain low-grade gold ores. They are at a high elevation, at some distance from good water, and only these facts and lack of good transportation has retarded their development. There are several good prospects, not yet examined, in the district.

Near Cave Creek station, five miles below Cave Creek, are several claims, where gold has been discovered in paying quantities, namely, Copper Top, Kentucky-Arizona and Rogers Spring, and southeast of Cave Creek Station are the Modoc, Mormon Girl and Howard & Houck claims.

The road from Cave Creek to Phoenix passes through the Winifred district, where there are several open and promising gold mines, including the Orofino, Union, Fortuna, and Blue Bell.

The ores at Cave Creek are found in breccia cemented with lime, and are carbonates, in which are found lead, cadmium and discolorite. In considerable quantities of the ores on Gold Hill and in the Winifred district are generally sulphides. Values range from \$1.00 to \$15.00 per ton in the various localities, and the ore is, as a rule, free milling, and entirely susceptible to cyanide treatment, making an average recovery of about 90 per cent possible.

We have been exceedingly surprised since we took over the mine at Cave Creek to observe the apparent neglect of this district, both by the general government and the mining element. It would be naturally supposed that districts within such a short distance of Phoenix, with its supplies, labor market, capital, and electrical power, would attract attention. A monograph on the region, showing its mineral possibilities, would be of great value to the state.

We also note that under the headings "Vanadinite" and "Desclozite" no mention is made of the occurrence of these minerals at Cave Creek. According to the reports of Messrs. Constant, Stokes and K. Thomas, all well known mineralogists, we have these minerals in large quantities, both yellow and red. A large band of vanadinite, assaying 3 per cent vanadic acid, is visible to the eye, in the slopes; and all the gold extracted from these slopes was coated with vanadinite, causing a great deal of trouble in clearing the amalgamation plates in the mill. Mr. Constant brought here from the dumps concentrates which assayed 20 per cent vanadium, and made a considerable quantity of vanadium soda. Dana's Mineralogy mentioned the presence of vanadinite yellow and red, and discolorite at this mine, a number of years ago.

We enclose rough sketch, showing approximately the location of the mines in Maricopa county which have been mentioned and will be very happy to give the Mining Bureau any further information desired, from the data and maps in our possession.

Proper transportation facilities from these districts to Phoenix and the railroad, and the development of the great water power which could be obtained by storage of the flood waters of Cave Creek and its subsidiaries, will in connection with the proximity to Phoenix at some time make this region, where gold, cadmium, tungsten, talc, onyx, marble, and other minerals exist, one of the most interesting in the state.

Messrs. Hatch, Clark and others connected with the company have visited this district and are much interested in its development.

Yours very respectfully,
William P. De Wolf
Prescott, Arizona, Jan. Mining operations in the Crown King country, tributary to Prescott, are being prosecuted under advantageous mineral conditions and with a degree of financial success which has not hitherto been equalled there since the day of "dollar silver" and the double standard monetary system in the United States. What may be termed the mining renaissance of that highly mineralized section of Yavapai county is attributable to the awakened interest of the general public in the profitable investment opportunities afforded by the mining industry as a whole; the marked degree of attention that Yavapai county and Arizona in general is receiving from mine operators and investors, and the satisfactory results which attend a more thorough prospecting of the Crown King field. Contributing causes are adequate railroad facilities, modern processes for the reduction of so-called refractory ores, and the increasing demand and price for lead, copper and zinc, which are the by-products of the gold and silver ores of that section.

Properties which were making mining history in days of Geronimo and the pioneer in Arizona are again being worked in the Crown King country under conditions which indicate an era of productivity greatly in excess of their records of past years. And these records are writ large on the pages of Arizona's mining history, as the following facts and figures will show:

WILLARD AGENTS PLEASED TO SERVE

Their First Aim Is to Do the Best By Their Car Owners—Service Station Is for Service

"As a rule, the term service station is something one thinks about only when he has trouble," says Mr. Fred Willard Kirkwood, local service man for the Willard Storage Battery Company.

In our case it's a little different. First of all, we want the motor car owners in this vicinity to feel that we are willing to do more than make their repairs for which we are paid. Often a man wants to know something about his battery or his electrical system, regardless of trouble.

"When the Willard Company arranges for a service station, it is with the understanding that it is being established for the car owner's welfare. They see to it that every distributor is properly equipped, both in tools and knowledge of batteries, to give expert service in all branches of battery work."

Besides the service stations must show a willingness to give information and advice to Willard owners without charging them for it. He must even go so far as to make a thorough examination of a Willard battery to determine its condition, and report this to the owner before any repairs are made.

"If a man gets some valuable suggestion which leads to a saving of trouble and money, he naturally goes to the source of that information when he needs repairs that cost him money."

PRECAUTIONS TAKEN TO GUARD GOLD CAR

Studebaker Chassis Encrusted With Precious Metal Is Eyed By Thugs—Detectives Guard It

Utmost precautions have been taken to insure the safe transportation of the \$25,000 Studebaker gold chassis around the circuit of cities where it is being placed on exhibition.

As an example, when the curtain was run down on the New York automobile show, S. J. Fournier, Cleveland agent of the American Express Company, was on hand to personally conduct the precious chassis to Cleveland. He rode in the special car that carried the chassis, being accompanied by a Pinkerton man, who is assigned to guard it at motor car shows where it is scheduled to be placed on view.

As a further precaution, the chassis was loaded on the special car right in the Grand Central Station, New York, instead of being towed over to the freight depot, as was done with the show cars. Permission was secured from the New York Central officials, inasmuch as this act set a new precedent.

Extreme measures are being taken by the Studebaker Corporation to prevent this chassis, containing 350 ounces of pure gold, from being stolen or mutilated. Carrying heavy insurance, this record-sized piece of gold is sent from city to city by express, never being entrusted to a freight car. It takes its place as the most expensive express "package" ever listed.

The importance which this gold chassis has assumed is indicated by the demand from dealers, automobile show officials and hotel men all over the country for permission to exhibit it in their cities. E. T. Hodgkins, general sales manager of the Studebaker Corporation, is being swamped with letters and telegrams.

neighborhood of the Crown King country, has shipped about \$2,000,000 worth of ore. From the Tiger Gold estate shipments of \$125 per ton ore have been made. The Savoy group has produced an ore carrying 250 ounces in silver to the ton, and a gold ore having an average value of \$28.00 per ton. The Eclipse has produced about \$100,000 worth of silver bullion, with the ore assaying as high as \$100 in silver to the ton. The War Eagle-Gladiator group has a production record of more than \$200,000 worth of gold bullion and concentrates. The Lincoln property, another old time producer, has outputted about \$600,000 worth of ore. Other properties in the Crown King country have flattering production records, but the before-mentioned will serve to demonstrate the value of the field as a whole.

The Crown King area is highly mineralized and carries an ore that resembles closely in character and mineral contents the better grade Tonopah ores. The prospectors and miners who are migrating to Yavapai county are very favorably impressed with the Crown King field and are devoting their energies to mineral research therein with considerable success. Among their number are several former Nevadans and Coloradans—notably Jim Sullivan, Cripple Creek and Tonopah pioneer.

The Eclipse mine, although small in area—a single claim—is another record maker of former years that is in line for a protracted era of prosperity in this day of modern mining and milling appliances. It lies next to the Savoy group and is owned by Luke Brothers of Phoenix. In the late '80s the Eclipse shipped about \$100,000 worth of ore, a considerable tonnage having a value as high as 1,000 ounces in silver per ton. It was mined in a parallel vein to what is known as the Tiger Gold ledge. The ore disclosed in the workings is not alone rich in silver, but in lead and zinc as well. It offers no treatment problem which cannot be solved by the oil flotation process. The extension of this rich ledge has been opened on the Bond property, where the same grade and character of ore is exposed.

Hire a little salesman at The Republican office. A want ad will get more customers than you can.

Court Battle Waged Over Their Custody



Elizabeth and Charles W. Gillett, Jr. A big battle in a Chicago court has just been waged over the custody of these children. Their father is Charles W. Gillett, and their mother, who was given their custody when she secured her divorce, is Mrs. H. J. Bryant, she having married again. The judge held that the mother could keep the children, but that the father might see them once each week.

GETTING THE CHILD'S VIEW. One of the commonest reasons for our failure to get along with young children, and for our failure to get the most out of them, is our attempt to understand their actions in terms of our own mature motives and values. Or rather, there is generally no attempt to understand at all, merely a measuring and criticizing on the assumption that their "reasons" for doing things are similar to our own.

HABITS OF CANDIDATES. "What has become of the candidate who used to have his photo taken beside a load of hay?" "He may be a little out of date. However, no candidate has as yet mustered up the nerve to have his photo taken beside a stock ticker."—Kansas City Journal.

SAGE TEA PUTS LIFE AND COLOR IN HAIR

Don't Stay Gray! Sage Tea and Sulphur Darkens Hair so Naturally that Nobody can tell.

You can turn gray, faded hair beautifully dark and lustrous almost overnight if you'll get a 50 cent bottle of "Wyeth's Sage and Sulphur Compound" at any drug store. Millions of bottles of this old, famous Sage Tea Recipe are sold annually, says a well-known druggist here, because it darkens the hair so naturally and evenly that no one can tell it has been applied.

Those whose hair is turning gray, becoming faded, dry, scraggly and thin have a surprise awaiting them, because after one or two applications the gray hair vanishes and your locks become luxuriantly dark and beautiful—all dandruff goes, scalp itching and falling hair stops. This is the age of youth. Gray-haired, unattractive folks aren't wanted around, so get busy with Wyeth's Sage and Sulphur tonight, and you'll be delighted with your dark, handsome within a few days.

WHEN IN FLAGSTAFF Stop at the

Commercial Hotel

Chas. Prochnow, Mgr., Rates \$1 up
Flagstaff, Ariz.

Points of Interest Near Flagstaff

Grand Canyon	45 miles
Extinct Volcanoes	18 miles
Lava Beds	16 miles
Ice Caves	16 miles
Prehistoric cliff dwellings	10 miles
Cave dwellings	10 miles
Oak Creek Trout Stream	18 miles
Montezuma's well	50 miles
San Francisco peaks	12 miles (Elevation 13,900 feet)
Altitude of Flagstaff	5907 ft.
Prehistoric Ruins	35 miles
Natural Bridge	75 miles

When Going East

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Stop washing hair! Try this! Makes hair glossy, soft and abundant.

Surely try a "Danderine Hair Cleanser" if you wish to immediately double the beauty of your hair. Just moisten a cloth with Danderine and draw it carefully through your hair, taking one small strand at a time. This will cleanse the hair of dust, dirt or any excessive oil—in a few minutes you will be amazed. Your hair will be wavy, fluffy and abundant and possess an incomparable softness, lustre and luxuriance. Besides beautifying the hair, one directed.

Danderine is to the hair what fresh showers of rain and sunshine are to vegetation. It goes right to the roots, invigorates and strengthens them. Its exhilarating, stimulating and life-producing properties cause the hair to grow long, strong and beautiful. You can surely have pretty, soft, lustrous hair, and lots of it, if you will just get a 25 cent bottle of Danderine from any drug store or toilet counter and try it as directed.

REPAIR DIRECTORY

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This Repair Directory gives all the principal places where an article can be repaired and should be preserved in every home as a ready guide.

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